

REMARKS

The above amendments to the above-captioned application along with the following remarks are being submitted as a full and complete response to the Office Action dated August 11, 2005 (U.S. Patent Office Paper No. 20050802). In view of the above amendments and the following remarks, the Examiner is respectfully requested to give due reconsideration to this application, to indicate the allowability of the claims, and to pass this case to issue.

Also, submitted concurrently herewith is an Information Disclosure Statement. Entry and consideration of this Information Disclosure Statement is respectfully requested.

Status of the Claims

As outlined above, Claims 1 through 11 are currently pending in this application. Also, Claims 2 through 11 have been amended to correct formal errors, place the claims in better form and to more particularly point out and distinctly claim the subject invention. Entry of the amendments to the Claims 2 through 11 is respectfully requested.

Additional Amendments:

The Specification and the Abstract of the Disclosure have been amended to correct formal errors and to better disclose and describe the features of the present invention. Entry of the amendments to the Specification and to the Abstract of the Disclosure is respectfully requested.

Also, the drawings have been amended and replacement sheets of drawings for amended Figures 6, 7, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 22, 25, 26, 30, 33, 34, 37, 38 and 39 have been submitted with the concurrently filed Letter to the Office Draftsperson. Specifically, in Figures 6, 7, 10, 11, 12, 13, 14, 15, 16, 17, 18, 20, 22, 30, 33, 37, 38, and 39 the spelling of "partition" has been corrected. Also, in Figures 16, 18 and 33 the spelling of "acquisition" has been corrected. In Figure 19, the spelling of "default" has been corrected. In Figure 22, the spelling of "conversion" has been corrected. In Figure 25 the spelling of "name" has been corrected. In Figure 26, the spelling of "system" and "disk" has been corrected. In Figure 34, the spelling of "coherency" has been corrected. In Figure 37, "marzzge" has been corrected to "merge", one of the numerals "3704" has been corrected to "3705", and the numeral "3705" has been corrected to "3706". In Figure 38, the spelling of

“split” has been corrected. In Figure 39, the numeral “3701” has been corrected to “3706”. Entry of the drawing corrections to Figures 6, 7, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 22, 25, 26, 30, 33, 34, 37, 38 and 39 is respectfully requested.

Prior Art Rejection

Claims 1 through 11 were rejected under 35 U.S.C. §102(e) over U.S. Patent No. 6,549,918 to Probert, Jr. et al., hereinafter referred to as the Probert ‘918 Patent. This rejection is respectfully traversed.

It is respectfully submitted that the Probert ‘918 Patent does not disclose:

a file sharing method for sharing a file stored in a storage system that is connected to a first host computer, which uses a first operating system for managing stored-location information of a file using a first format, and that is connected to a second host computer, which uses a second operating system for managing stored-location information of the file using a second format different from the first format, including the steps of: converting the stored-location information of the file in the first format into stored-location information in the second format; and reading the file on the basis of the stored-location information in the second format, as respectively recited in Claim 1;

a file sharing method, wherein the first operating system manages a stored location of a file on the basis of a block having a first fixed length, the second operating system manages a stored location of a file on the basis of a block having a second fixed length that is different from the first fixed length, and the conversion step converts the stored-location information of the file in the first format into stored-location information in the second format on the basis of a ratio of a data length of the first fixed length to a data length of the second fixed length, as respectively recited in dependent Claim 2;

a storage system that is connected to a first host computer, which uses a first operating system for managing stored-location information of a file using a first format, and that is connected to a second host computer, which uses a second operating system for managing stored-location information of the file using a second format different from the first format, including: a disk controller including an interface for connecting to the first host computer and the second host computer, and an interface for connecting to a plurality the disk drives, the disk controller including a means for holding stored-location information of a file, which is stored in any one of the plurality of disk drives, in the second format, the stored-location information of the file of the second format corresponding to the stored-location information of the file in the first format, and a means for reading the file on the basis of the

stored-location information in the second format when an access request to access the file is issued from the second host computer, as respectively recited in Claim 4;

a storage system, wherein the disk controller includes a means for converting the stored-location information of the file in the first format into stored-location information in the second format, in response to a ratio of a data length of a first fixed-length block, which is used when the first operating system manages the stored location of the file, to a data length of a second fixed-length block, which is used when the second operating system manages the stored location of the file, as respectively recited in dependent Claim 5;

a storage system that is connected to a first host computer, which uses a first operating system for managing stored-location information of a file using a first format, and that is connected to a second host computer, which uses a second operating system for managing stored-location information of the file using a second format different from the first format, the storage system including: a disk controller including an interface for connecting to the first host computer and the second host computer, and an interface for connecting to a plurality of disk drives, wherein the disk controller mirrors a file, which is stored in any one of the plurality of disk drives and is managed under the first operating system, in another disk drive of the plurality of disk drives, the disk controller converts the stored-location information of the file in the first format into its corresponding stored-location information in the second format to write the corresponding stored-location information into the another disk drive, and the disk controller reads the file from the another disk drive when an access request to access the file is issued from the second host computer, as respectively recited in Claim 10; and

a storage system, wherein the disk controller converts the stored-location information of the file in the first format into stored-location information in the second format, according to a ratio of a data length of a first fixed-length block, which is used when the first operating system manages the stored location of the file, to a data length of a second fixed-length block, which is used when the second operating system manages the stored location of the file, as respectively recited in dependent Claim 11.

The position of the Examiner that, regarding Claims 1, 2, 4, 5, 10 and 11, the Probert '918 Patent discloses a storage system that is connected to a first host computer, which uses a first operating system for managing stored location information of a file using a first format, and that is connected to a second host computer, which uses a second operating system for managing stored location information of the file using a second format different from the first format, referring to Figure 2, elements 222 and 226; Abstract and Col. 9, lines 40-45 and Col.

14, lines 33-36 of the Probert '918 Patent (Office Action, Page 3) is respectfully traversed.

In contrast, the Probert '918 Patent discloses a software layer, or a filter driver, that resides between software components or application programs running locally or on a client network and a persistent store of an operating system provides on-the-fly-conversions of persistent information formats, and discloses that the filter driver can be used to transparently give older versions of software access to information stored in newer versions. (Abstract of the Probert '918 Patent)

Further, in contrast, the Probert '918 Patent discloses that the on-the-fly-conversion allows clients, such older version applications, to read and write files that are in a newer format, and allows files to be accessed according to "how-to" rules that satisfy the older and newer format requirements. Also, in contrast, the Probert '918 Patent discloses that files in the newer format are not degraded into the older format, unless absolutely necessary. (Col. 9, lines 40-45 of the Probert '918 Patent)

It is respectfully submitted that the Probert '918 Patent's use of a software layer or filter driver for on-the-fly conversions of persistent information formats, with the filter driver being used to transparently give older versions of software access to information stored in newer versions, does not disclose a storage system that is connected to a first host computer, which uses a first operating system for managing stored location information of a file using a first format, and that is connected to a second host computer, which uses a second operating system for managing stored location information of the file using a second format different from the first format.

Further, the position of the Examiner that the Probert '918 Patent discloses a means for holding stored location information of a file, which is stored in any one of a plurality of disk drives, in a second format, the stored location information of the file of the second format corresponding to the stored location information of the file in a first format; referring to Figure 2, items 234 and 236, and related text of the Probert '918 Patent (Office Action, page 3), is respectfully traversed.

In contrast, the Probert '918 Patent discloses that the filter driver 230 interfaces with a native file system 234 which stores data in a multi stream format on secondary storage 236, with the secondary storage including virtual or physical disks or other type of persistent storage (Col. 7, lines 56-66 of the Probert '918 Patent).

However, it is respectfully submitted that such disclosure of the Probert '918 Patent of a filter driver that interfaces with a native file system which stores data in a multi stream format on secondary storage does not disclose a means for holding stored location information of a

file, which is stored in any one of a plurality of disk drives, in a second format, the stored location information of the file of the second format corresponding to the stored location information of the file in a first format. In this regard, it is respectfully submitted that such disclosure of secondary storage in the Probert '918 Patent does not disclose stored location information of a file of a second format corresponding to the stored location information of the file in a first format.

Also, the positions of the Examiner that the Probert '918 Patent disclose converting stored location information of a file in a first format into stored location information in a second format, referring to Figure 2, elements 230, 234 and 236 of the Probert '918 Patent, based on a fixed length block, referring to Col. 8, lines 7-10 of the Probert '918 Patent, (Office Action Pages 3 and 4) are respectfully traversed.

As mentioned previously, in contrast, the Probert '918 Patent discloses that the filter driver 230 interfaces with a native file system 234 which stores data in a multi stream format on secondary storage 236, with the secondary storage including virtual or physical disks or other type of persistent storage (Col. 7, lines 56-66 of the Probert '918 Patent).

However, it is respectfully submitted that such disclosure of the Probert '918 Patent of a filter driver that interfaces with a native file system which stores data in a multi stream format on secondary storage does not disclose converting stored location information of a file in a first format into stored location information in a second format.

Moreover, it is respectfully submitted that the Probert '918 Patent's disclosure of a file system storing data in multi-stream format, with the different streams representing different types of format of data in a document, such as text, graph and spreadsheet (Col. 8, lines 7-10 of the Probert '918 Patent), does not disclose converting stored location information of a file in a first format into stored location information in a second format based on a fixed length block, but rather only discloses different streams representing different types of format of data in a document.

In view of the foregoing, it is respectfully submitted that the Probert '918 Patent does not disclose the features of Claims 1, 2, 4, 5, 10 and 11 and, therefore does not anticipate these claims, as well as not anticipating dependent Claims 3 and 6 through 9, which respectively ultimately depend from Claims 1 and 4.

Therefore, withdrawal of the rejection of Claims 1 through 11 under 35 U.S.C. §102 (e) is respectfully requested.

Reconsideration and allowance of Claims 1 through 11 are respectfully requested.

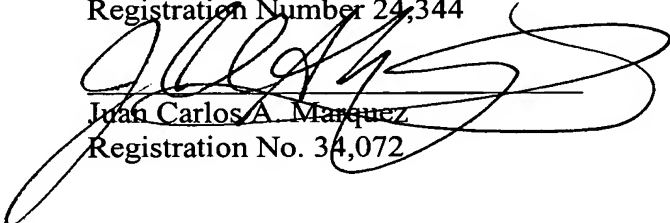
Conclusion

In view of all the above, Applicants respectfully submit that certain clear and distinct differences as discussed exist between the present invention as now claimed and the prior art reference upon which the rejection in the Office Action relies. These differences are more than sufficient that the present invention as now claimed would not have been anticipated nor rendered obvious given the prior art. Rather, the present invention as a whole is distinguishable, and thereby allowable over the prior art.

Favorable reconsideration of this application as amended is respectfully solicited. Should there be any outstanding issues requiring discussion that would further the prosecution and allowance of the above-captioned application, the Examiner is invited to contact the Applicants' undersigned representative at the address and telephone number indicated below.

Respectfully submitted,

Stanley P. Fisher
Registration Number 24,344


Juan Carlos A. Marquez
Registration No. 34,072

REED SMITH LLP
3110 Fairview Park Drive
Suite 1400
Falls Church, Virginia 22042
(703) 641-4200

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SPF/JCM/JB

IN THE DRAWINGS:

Replacement sheets of drawings for amended Figures 6, 7, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 22, 25, 26, 30, 33, 34, 37, 38 and 39 have been submitted with the concurrently submitted Letter to the Office Draftsperson. Specifically, in Figures 6, 7, 10, 11, 12, 13, 14, 15, 16, 17, 18, 20, 22, 30, 33, 37, 38, and 39 the spelling of “partition” has been corrected. Also, in Figures 16, 18 and 33 the spelling of “acquisition” has been corrected. In Figure 19, the spelling of “default” has been corrected. In Figure 22, the spelling of “conversion” has been corrected. In Figure 25 the spelling of “name” has been corrected. In Figure 26, the spelling of “system” and “disk” has been corrected, and. In Figure 34, the spelling of “coherency” has been corrected. In Figure 37, “marzzge” has been corrected to “merge”, one of the numerals “3704” has been corrected to “3705”, and the numeral “3705” has been corrected to “3706”. In Figure 38, the spelling of “split” has been corrected. In Figure 39, the numeral “3701” has been corrected to “3706”. Entry of the drawing corrections to Figures 6, 7, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 22, 25, 26, 30, 33, 34, 37, 38 and 39 is respectfully requested.